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JUN 21 1994

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North Carolina Department of Environment,  
Health, and Natural Resources  
Attn: Mr. Patrick Watters  
P.O. Box 27687  
401 Oberlin Road  
Raleigh, NC 27611

Re: MCB Camp Lejeune  
Response to NC DEHNR Comments  
Draft Site Inspection Project Plans  
(Sites A, 12, 68, 75, 76, 84, & 85)

Dear Mr. Watters:

Enclosed are Navy/Marine Corps responses to your comments on the above-referenced documents. The Draft Final versions of the documents (issued April 22, 1994) incorporate these comments.

Please direct any questions to Ms. Katherine Landman at  
(804) 322-4818.

Sincerely,

*L. A. Boucher*

for L. A. BOUCHER, P.E.  
Head  
Installation Restoration Section  
(South)  
Environmental Programs Branch  
Environmental Quality Division  
By direction of the Commander

Enclosure

Copy to:

EPA Region IV (Ms. Gena Townsend)  
MCB Camp Lejeune (Mr. Neal Paul)  
Baker Environmental, Inc. (Mr. Ray Wattras)  
Activity Admin Record File

**Response to Comments Submitted by the  
North Carolina DEHNR on the Draft Site Inspection Project Plans  
Sites A, 12, 68, 75, 76, 84, and 85  
MCB Camp Lejeune, NC  
Letter Dated March 17, 1994**

Response to Work Plan Comments

1. The capacity of the treatment plant has been changed to "approximately 15" million gallons per day.
2. The size of the sites on Table 2-2 has been revised and concur with the appropriate figures. The title of the column has been changed to "Study Area" since the actual site boundary is unknown in many cases.
3. In the event that no subsurface anomalies are detected via the geophysical investigation, 16 borings will be drilled to assess surface and subsurface soil conditions. This number of sampling locations is sufficient to assess the study area, based on the reported size of the burial pit (90 feet by 70 feet), and a 50 percent probability of encountering the disposal area. A 50 percent probability was determined to be appropriate considering that a geophysical investigation will be initially conducted to determine the location of buried drums. If buried drums are not detected via the geophysical investigation, it is unlikely that the reported disposal of drums occurred at the site. Therefore, a sampling grid based on a probability of 50 percent was determined to be sufficient.
4. The reason that the deeper aquifer is being investigated as part of the SI is that a supply well in the area (Supply Well RR-227) was shut down due to TCE contamination. Therefore, deep monitoring wells are being installed to evaluate whether this TCE contamination is emanating from Site 68. For purposes of an SI, only shallow groundwater is being investigated at the other sites to determine whether the reported disposal activities have resulted in a release to the environment.

Test pitting is the preferred method to investigate subsurface conditions at Site A in order to verify whether anything is actually buried at the site. Based on existing information, chemical surety agents are not believed to have been buried at this location.

The US Army TEU will not be required to assist in the investigations at Sites 75 or 76. These sites reportedly contain drums with "tear gas" and not chemical surety agents. Tear gas is not a surety agent. Note that the analytical program has been revised to analyze for constituents of tear gas as opposed to surety agents.

The depth of the test pits at Site A will be terminated when the water table is encountered, which is expected to be at a depth of approximately 4 to 5 feet below ground surface. Based on past experiences at MCB Camp Lejeune, debris (if present) would be present within 2 feet of the ground surface.

With respect to the different sampling depths, the work plan provides the rationale for each site. For Site 12 (see page 4-5 in the Work Plan), only one subsurface soil sample

will be taken just above the water table in order to determine whether the source of the petroleum is related to site activities or whether the petroleum is related to offsite activities. If the petroleum is related to onsite activities, contaminants may be present in subsurface soils. If the petroleum is related to offsite sources (e.g., USTs), petroleum would not be expected to be present in subsurface soils.

For sites 75 and 76, a surface and subsurface soil sample is being collected to assess potential human health exposure (surface soil data) and to assess whether buried drums are leaking (subsurface soil data). Surface soil data is important since both Sites 75 and 76 are in a residential area.

For Sites 84 and 85, surface (0 to 12 inches) and near surface (12 to 24 inches) soil data are being collected to assess whether PCB constituents have been released into the environment. PCBs do not normally migrate in soil due to their nature. The soil data will meet the objective of determining whether a release has occurred, and the degree of soil contamination in the event that a removal action is necessary.

5. Surface water and sediment samples will be collected at Site A.
6. A second onsite monitoring well will be installed as an optional well, pending the results of the test pit investigation. If debris or wastes are observed during the test pit investigation, a second monitoring well will be installed in the area of concern.
7. An ordnance survey has been included in Section 4.3.2 of the Work Plan as opposed to the Sampling and Analysis Plan. The ordnance survey will be conducted by a subcontractor, who will provide site-specific procedures for both surficial clearance as well as borehole clearance.
8. The purpose of the SI at Site 12 is to investigate petroleum product and odors which were encountered during the detonation operations. The site is still used to detonate UXO. Ordnance constituents are undoubtedly present throughout the area.
9. A geophysical investigation may be considered if an RI/FS is warranted at the site. Aerial photographs have been reviewed to determine the boundary of the former disposal area. A UXO survey is not warranted since no ordnance has been reported to have been disposed of at this site.
10. Both monitoring wells will be placed in an area where batteries are present on the surface (and possibly subsurface). The objective of the SI at Site 85 will be to determine whether groundwater has been impacted by past disposal activities. Two monitoring wells, each located at a potential source area, should be sufficient to evaluate potential release of contaminants. If the groundwater is determined to be impacted by the batteries, the Site will likely be investigated under an RI/FS, and additional wells will be warranted.
11. The criteria stated in Section 6 of Appendix J for handling IDW is acceptable. The guidance document referenced in the comment is for the remediation of PCB-contaminated soil or liquids. This document will be applicable in the event that soil or water requires remediation due to PCB contamination.

IDW contaminated with PCBs will be handled as noted in Appendix J. This procedure (see Section 6) is consistent with EPA guidance on the handling of IDW (see Pg. 4 of OSWER Directive 9345.3-03FS for a discussion of PCB wastes).

12. Attachment A of Appendix K has been revised. The Contract Laboratory Protocol holding times have been revised.

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